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Per California Code of Regulations, title 2, section 548.5, the following information will be posted to CalHR's Career Executive Assignment Action Proposals website for 30 calendar days when departments propose new CEA concepts or major revisions to existing CEA concepts. Presence of the department-submitted CEA Action Proposal information on CalHR's website does not indicate CalHR support for the proposal.

A. GENERAL INFORMATION		
1. Date	2. Department	
11/1/2015	CalPERS	
3. Organizational Placement (Division/Branch/Office Name)		
Operations and Technology / Information Technology Services Branch		
4. CEA Position Title		
Chief Technology Officer		
5. Summary of proposed position description and how it relates to the program's mission or purpose. (2-3 sentences)		
The California Public Employees Retirement System (CalPERS) proposes to create a CEA B allocation titled "Chief Technology Officer" (CTO). This change is needed to support the current and future CalPERS business technology needs, gain operational efficiencies, and align like services within the Information Technology Services Branch to eliminate redundancies and streamline production processes. The CTO is an executive-level position within ITSB that reports directly to the Chief Information Officer (CIO) and has full management responsibility over the physical CalPERS technology infrastructure, two data centers, and one emergency disaster recovery site. The CTO is tasked with delivering world class internal customer service and ensuring system availability for CalPERS mission critical technology services in support of the CalPERS members and business partner communities. This includes providing leadership, setting strategy, and developing policies for data center operations which includes: planning, design, development, implementation, monitoring, evaluation, administration, and documentation of the hardware, software, data center operations, voice and data networks, data storage facilities, servers, and desktop computer equipment at CalPERS. The CTO position has broad authority for strategy and policy development for achieving synergies across the contributing infrastructure units to establish integrated, consistent, and high-quality service levels needed to build effective solutions that focus on the customer and add business value.		
6. Reports to: (Class Title/Level)		
Chief Informatio	n Officer	
7. Relationship v	with Department Director (Select one)	
	department's Executive Management Team, and has frequent contact with director on a of department-wide issues.	
	er of department's Executive Management Team but has frequent contact with the anagement Team on policy issues.	
(Explain):		
8. Organizational Level (Select one)		
☐ 1st ☐ 2nd ☑ 3rd ☐ 4th ☐ 5th (mega departments only - 17,001+ allocated positions)		

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B. SUMMARY OF REQUEST

9. What are the duties and responsibilities of the CEA position? Be specific and provide examples.

The CTO is a member of the CalPERS Senior Leadership Team and provides strategic oversight and policy direction for the technology infrastructure that comprises the backbone of the technology systems supporting the CalPERS mission critical services that internal staff, members and employers use each day. This includes, but is not limited to my|CalPERS, PeopleSoft, Intranet, Contact Center interactive voice response (IVR) technologies, enterprise email services, and backup and recovery services and solutions. The CTO play a major role in the formulation, implementation, and evaluation of IT Services branch strategies and policies and has broad authority for recommending and implementing division-wide policies with significant impact on all CalPERS programs as it relates to information infrastructure services.

The CTO serves as member of various governance committees including the CalPERS Senior Leadership Council, Enterprise Architecture Council, my|CalPERS Leadership Council and the ITSB Senior Leadership Council. The CTO also represents the Division and/or Branch in senior management meetings with executive management and at the CalPERS Board of Administration meetings regarding items related to technology infrastructure operations and support. In this capacity, the CTO prepares thorough and accurate agenda material; provides sound technical consultation and appropriate recommendations; and makes clear and concise presentations to the CalPERS Board of Administration and Board Committees on issues relevant to the Technology Infrastructure Services Division.

The CTO also represents CalPERS on the most sensitive and complex issues before other State entities, including control agencies; State of California Technology Agency, and the National Public Employees' Retirement IT Organizations. The CTO is the Project Director over large complex technology infrastructure projects and must maintain direct contact and provide contract oversight of technology infrastructure vendors contracting with CalPERS.

The CTO's responsibilities also include:

- Provides leadership and sets policy direction for data center and CalPERS Contact Center systems management services including planning, configurations, preparations, documentation, and support for development, testing, integration, staging, and production activities; works with appropriate stakeholders to identify necessary systems environment support provisions for building and providing infrastructure services; oversees the process of designing and developing monitoring and alerts to ensure availability and performance to expected service levels; oversees working environments and documentation of systems management processes for storage management services including cloud storage solutions, server engineering and enterprise storage area networks.
- Provides leadership and sets policy direction for network management services including voice and data network services, security management, telephony support, and network engineering; works with appropriate stakeholders to identify necessary voice and data integration touch points for building best practices communications solutions; oversees the process of developing integration designs to implement desired cross-solution telephony services; oversees enterprise desktop support for CalPERS staff and resources including configuration services, software deployment, and on-site support services for workstation issues.
- Provides leadership and sets policy direction to customer support for CalPERS IT systems and applications including computer operations and production services, online batch services, availability and performance management; oversees service desk management, incident reporting and resolution, customer service trend analyses, and management of outstanding issues; oversees the process of developing service designs to implement desired business level expectations and agreements; maintains and updates access management to IT services.
- Provides leadership and sets policy direction for server and server infrastructure management including middle tier systems and configurations, server systems and configurations, and server data protection; works with appropriate stakeholders to define user experience goals for server-based applications and integration requirements, including confidence, trust, speed, and satisfaction; oversees the process of designing, managing, developing, maintaining, and assessing server information services; oversees database management including planning, logical and physical modeling, data table preparations and management, processes, documentation, and support for data access performance and use activities.
- Provides leadership and sets direction to the business areas on infrastructure innovations and service options to facilitate better enterprise decision-making; forecasts future infrastructure service needs.

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B. SUMMARY OF REQUEST (continued)

10. How critical is the program's mission or purpose to the department's mission as a whole? Include a description of the degree to which the program is critical to the department's mission.		
	am is directly related to department's primary mission and is critical to achieving the ment's goals.	
☐ Progra	am is indirectly related to department's primary mission.	
$\hfill\Box$ Program plays a supporting role in achieving department's mission (i.e., budget, personnel, other admin functions).		
	Similar to how basic physical and organizational structures and facilities such as roads, buildings, running water, and electrical lines are needed for the effective operation of society, the role of technology infrastructure is essential to the success of CalPERS mission. The technology infrastructure provides the foundational services necessary for applications, like cars, to run. Like well-planned cities, infrastructure services must be coordinated to avoid dead-ends, congestion, and dysfunction.	
	Organized integration of infrastructure is the key to a smooth-running technology foundation and the CTO provides strategy and policy leadership, decision making, and the resources needed to integrate and deliver superior end to end support for all of CalPERS technology infrastructure services. These services ensure that CalPERS can meet its mission to support those who serve California by providing efficient stewardship of the System, delivering promised retirement and health benefits, and promoting wellness and retirement security for members and beneficiaries 24 hours a day, 7 days a week. The technology infrastructure services also enable CalPERS to effectively administer payroll, determine accurate compensation benefits for retirees, empower investments and pension control, and provide health care coverage services for members.	

B. SUMMARY OF REQUEST (continued)

11. Describe what has changed that makes this request necessary. Explain how the change justifies the current request. Be specific and provide examples.

In 2011, the integrated my|CalPERS platform replaced 49 independent legacy and 60 support systems. In April 2013, CalPERS progressively assumed responsibility from the systems integrator for maintenance and enhancement support of the new my|CalPERS platform, and effective July 1, 2013, a new Information Technology Services Branch was established "to properly support and sustain the my|CalPERS system".

The 2013 restructure was successful in meeting its objective, however, the outcome was 3 Divisions who perform similar infrastructure business functions for 3 distinct sets of services: 1) my|CalPERS 2) Enterprise Services and 3) Customer Support Technologies. Within these services, the level of responsibility and complexity has dramatically increased in the last couple of years to support several efforts including the Security Roadmap Project, Business Intelligence, Enterprise Content Management, Enterprise Resource Planning, and Business Continuity Planning and Testing.

The proposed CTO role will consolidate these 3 Divisions and unify all related infrastructure services under a single vertical to maximize staff resources and skillsets by merging staff who perform similar duties under a single service model and business framework.

The CTO will also assume decision making, policy influence, and authority over IT operations to support all programs and operations specific to the CalPERS 2,900 users, 1.7M members and 3,094 employers who depend on the 5,000 network computers, 400 laptop computers, 300 printers, 100 switches, 1,100 virtual and physical servers, 23 firewalls, and 12 routers maintained by ITSB. Further, the CTO oversees two data centers which provide a wide array of IT infrastructure services including telecommunications, data communications, systems engineering, database administration, middle tier software management, server hosting, storage management, database backup and restore, business continuity planning and testing, contact center application support, service desk, and desktop support.

CalPERS Strategic and Business Plan goals increasingly require strong partnerships between CalPERS program areas and ITSB, driven from the top. Additionally, over 90% of CalPERS business agencies now rely on my|CalPERS services, requiring cross-dependent IT external relations. Further, the need for optimization and continued investment in the my|CalPERS platform requires broader strategies and policies to integrate the enterprise architectures and infrastructures supporting my|CalPERS. The role of the CTO will provide the level of consistency and uniformity of service direction and execution needed to address these critical service needs.

Without the CTO role, service gaps are likely, particularly for mission-critical commitments. Therefore, CalPERS requests the new CEA Range B position commensurate with third level departmental support and the increasing responsibilities associated with supporting the technology infrastructure that provides services for the Nation's largest and most complex pension fund.

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C. ROLE IN POLICY INFLUENCE

12. Provide 3-5 specific examples of policy areas over which the CEA position will be the principle policy maker. Each example should cite a policy that would have an identifiable impact. Include a description of the statewide impact of the assigned program.

This position has full authority and accountability for the Technology Infrastructure Services Division (TISD) within the Information Technology Services Branch, for CalPERS, the statewide, multi-billion fund responsible for providing health and retirement benefits to all state and contracting public agency employees and beneficiaries. The policy level responsibilities assigned to this position include but are not limited to the following:

- o The position formulates, modifies, and implements new and existing policies and procedures supporting various State Administrative Manual (SAM) Sections 4900-5200 and the Statewide Information Management Manual (SIMM) #47, 55, 57, 67, 80, 125, 160, and others.
- Oversees and provides policy direction to customer support for CalPERS IT systems and applications including service desk management, incident reporting and resolution, tracking of customer issues, customer service trend analyses, and management of outstanding issues;
- Oversees and provides policy direction for computer operations and production services including online and batch
 processing for all of CalPERS applications and technology services, availability and performance management, print
 scheduling, problem detection and resolution, and pre-production scheduling and management of operations and
 production workloads.
- Oversees and provides policy direction for enterprise desktop support for CalPERS staff and resources including configuration services, software deployment, and on-site support services for workstation issues;
- Oversees and provides policy direction for network management services including voice and data network services, security management, telephony support, and network engineering;
- Oversees and provides policy direction for multiple data centers and Contact Center systems management services including planning, configurations, preparations, documentation, and support for development, testing, integration, staging, and production activities for data center and Contact Center technology systems;
- Oversees and provides policy direction for storage management services including cloud storage solutions, server engineering, and enterprise storage area networks; maintains data storage architecture and storage management models;
- Oversees and provides policy direction for server and server infrastructure management including middle tier systems and configurations, server systems and configurations, and server data protection;
- Oversees and provides policy direction for database management including planning, logical and physical modeling, data table preparations and management, processes, documentation, and support for data access performance and use activities.

Specific examples of policy responsibilities within these areas of responsibility include:

- Defining response times and escalation paths for incidents and problems affecting production services
- Developing standards for prevention of system failures through fail-over processing
- Setting desktop tools standards, internet access standards, and standards regarding storage of local data on workstations
- Creating service level agreements for online and batch services for agency partners Internal Agreements)
- Defining business disruption and disaster recovery programs, as well as test plans and outcomes
- Establishing hardware replacement strategies based on useful life
- Determining access management practices to ensure continuous protection of data and assets
- Establishing quality standards for peak processing windows, including dynamic workload adjustments based on defined priorities

The Statewide impact of these policies affects 2,900 internal users, 1.7M members and 3,094 employers. CalPERS membership is divided approximately in thirds among current and retired employees of the state, schools, and participating public agencies. Approximately half of CalPERS members pay into Social Security. The position has a direct impact on contracting agencies, member, and their families, through the policies established governing CalPERS benefits and services. In a broader context, the efficient administration and protection of CalPERS programs impacts all taxpayers.

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C. ROLE IN POLICY INFLUENCE (continued)

13. What is the CEA position's scope and nature of decision-making authority?

Chief Technology Officer (CTO) serves as a member of the IT senior leadership team and reports directly to the Chief Information Officer. The CTO is responsible for CalPERS's IT infrastructure and network system maintenance and operations policy framework to ensure around the close support of the Department's mission critical IT solutions, projects and applications.

The CTO will continuously perform infrastructure maturity assessments to ensure staffing levels and support models are commensurate with the level of support to sustain CalPERS's mission.

The CTO is responsible for adapting and updating policy as necessary to successfully adhere to Board mandates, execute all projects, support all application and deploy resources.

As a member of the Senior Management Team, the CTO is also responsible for contributing and carrying out the Strategic Plan and formulating and implementing division-wide policies that will impact all of CalPERS programs. The CTO also has broad authority and management responsibility for achieving necessary synergies between CalPERS business units, products, and technology services, including customer technology services and support, and data center services. The CTO is also charged with setting policies that ensure alignment and efficiencies between services responsible for computer operations and production, service desk, desktop support, voice and data networks, data center systems, server support, middle tier services, and database management.

14. Will the CEA position be developing and implementing new policy, or interpreting and implementing existing policy? How?

The CTO will both create new and implement/interpret existing policies. Since technology infrastructures are complex and many-layered, starting over from scratch in establishing strategy and policy is not feasible. Like a city, a basic infrastructure is already in place. Revisiting policies is periodically recommended, but usually addressed one area at a time.

New policies are continuously required as technology advances. No server, network, storage, desktop, or mobile device stays stable in technology; many devices have a one to three year life expectancy. Additionally, increasing technology capabilities often cause relooks at existing policies. For example, cloud computing was once too controversial for widespread use; today it is a preferred solution. Similarly, linking mobile phones with Agency email systems continuously affords new capabilities and infrastructure challenges.

The CTO will normally address new or existing policies first with internal staff experts and external business partners and a risk analysis is performed to identify policy gaps and solutions. Proposed policies and new interpretations of existing policies are generally reviewed by the ITSB executive team to ensure consistency and compliance with enterprise-wide strategies, and policies are also generally reviewed with key clients. Approved policies are enacted through documentation and training, along with updates to associated portals, practices, reference libraries and appropriate media channels. Some policies are also built directly into technology tools, such as desktop configurations and accessible web sites.